



DECEMBER 2017

This report contains statistical and operational data of activities at the Traffic Management Center(TMC) for the period Friday December 1st to Sunday December 31st.

TRAFFIC MANAGEMENT CENTER

Executive Summary

TOTAL INCIDENTS

The total number of incidents during a given period. An incident is defined as any event on the roadway which affects or can affect normal traffic flow. (Excludes roadwork)

Previous Month	Current
November 2017	December 2017
3353	3597

INCIDENTS WITH LANE BLOCKAGE

The total number of incidents which resulted in at least one blocked lane of travel. (Excludes roadwork)

Previous Month	Current
November 2017	December 2017
262	335

MULTI-VEHICLE INCIDENTS

The total number of multi-vehicle incidents during this period. A multi-vehicle incident is defined as any type of collision between two or more vehicles on a roadway.

Previous Month	Current
November 2017	December 2017
261	294

AVERAGE TIME TO CLEAR LANES

The average time for all lanes to be cleared for an incident. The time is calculated from the incident start time until all lanes are reopened. (Excludes roadwork)

Previous Month	Current
November 2017	December 2017
56 MIN.	55 MIN.

SECONDARY INCIDENTS

A secondary incident is defined as a collision that occurs within the incident scene or within the queue resulting from the original incident.

Previous Month	Current
November 2017	December 2017
17	15

TOTAL HIGHWAY HELPER INCIDENT RESPONSES

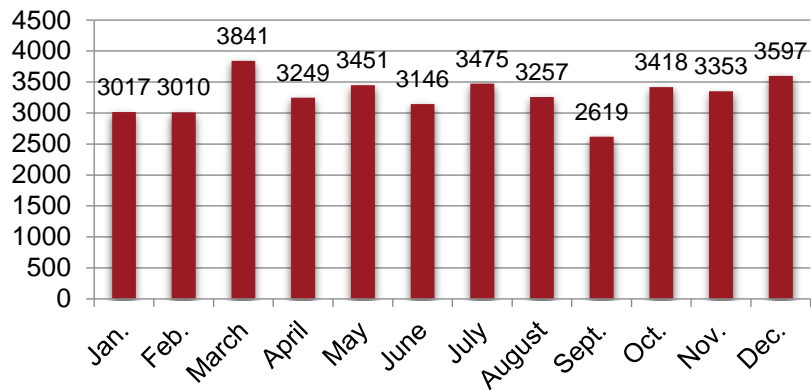
The total number of incidents Highway Helper responded to during the given period.

Previous Month	Current
November 2017	December 2017
1678	1659

TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

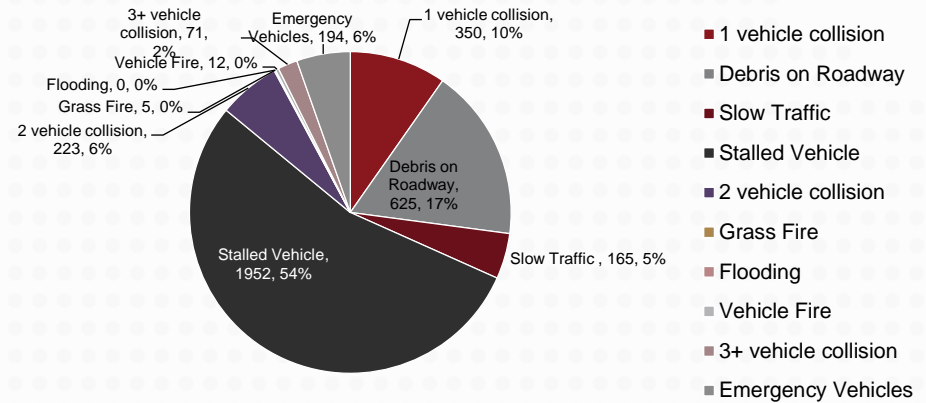
TOTAL INCIDENTS MANAGED BY THE TMC

The total number of incidents during a given period. An incident is defined as any event on the roadway which affects or can affect normal traffic flow.

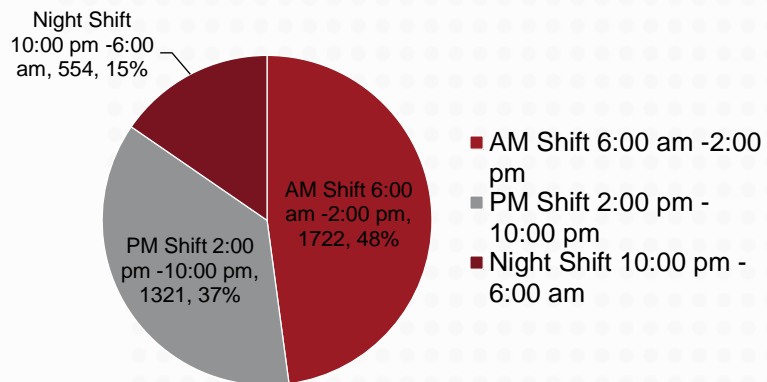


INCIDENT TYPES (3597)

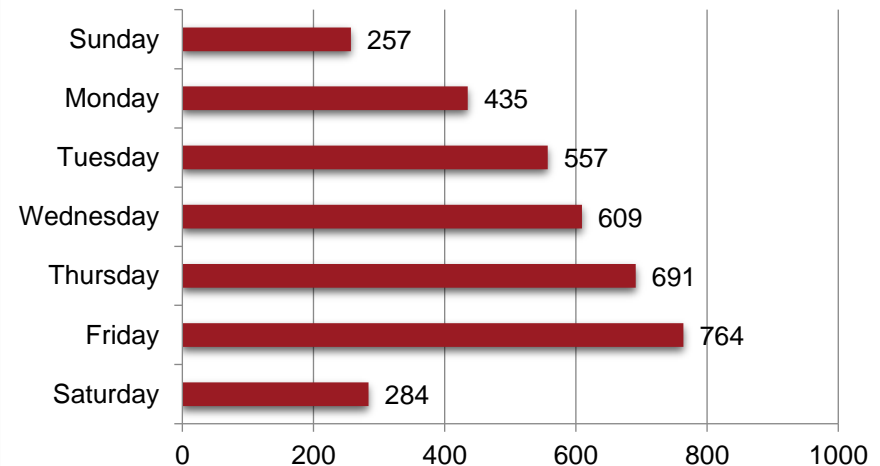
Represents the total amount of incidents categorized by Incident Type.



INCIDENTS MANAGED BY SHIFT (3597)



TOTAL INCIDENTS BY DAY OF THE WEEK (3597)



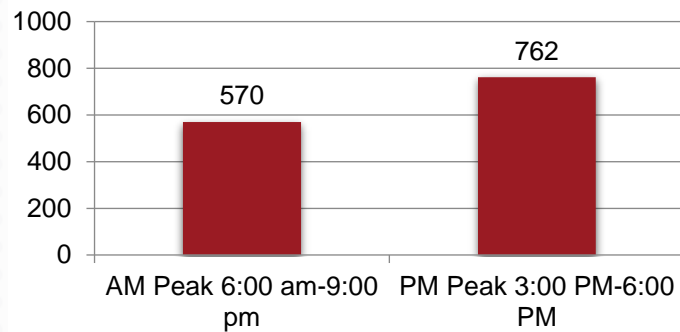
TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

INCIDENTS MANAGED DURING PEAK HOUR (1332)

(37% of Total Incidents)

Peak Hours is defined as:

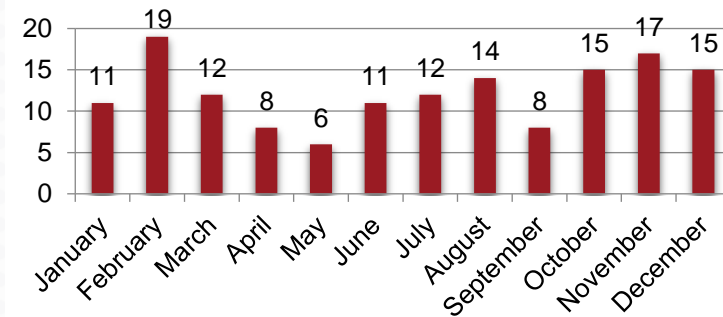
AM 6:00 am-9:00 am; PM 3:00 pm-6:00 pm



SECONDARY INCIDENTS

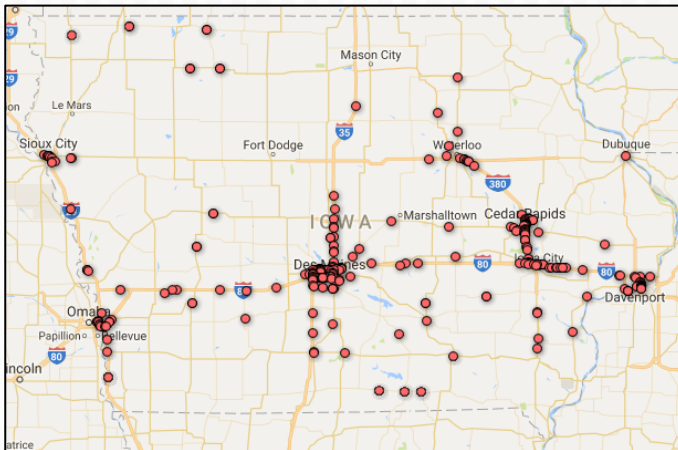
Secondary incidents can be more severe than the original incident, due to slow moving traffic or stopped queues on the roadway.

Fifteen (15) incidents were classified as secondary.



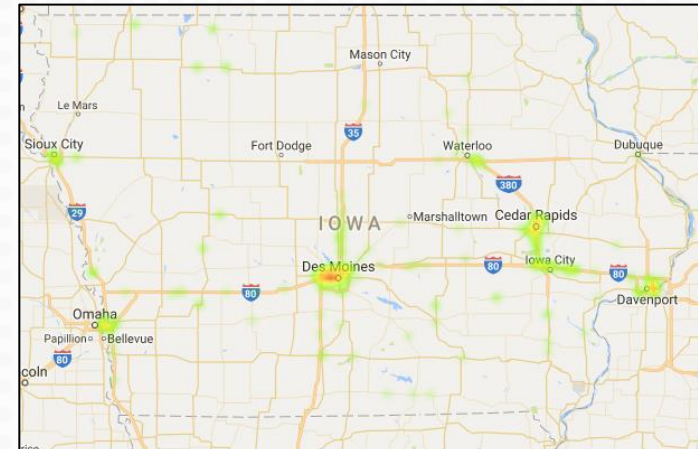
INCIDENTS BY LOCATION (EACH INCIDENT REPRESENTED BY ●)

335 Lane blocking incidents only – (excludes road work)



INCIDENT LOCATION DENSITY HEAT MAP

335 Lane blocking incidents only – (excludes road work)



TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

AVERAGE TIME TO CLEAR A LANE-BLOCKING INCIDENT (ALL ROUTES)

Calculated from the incident start time until all lanes are reopened.

The Desired Trend is to decrease the time to clear incidents with increased Traffic Incident Management collaboration.

"ROADWAY CLEARANCE TIME"

(All lanes are reopened)

55 MIN.

"EVENT" CLEARANCE TIME

(All responders have left the incident scene)

68 MIN.

AVERAGE TIME TO CLEAR A LANE-BLOCKING INCIDENT (INTERSTATES ONLY)

Calculated from the incident start time until all lanes are reopened.

The Desired Trend is to decrease the time to clear incidents with increased Traffic Incident Management collaboration.

"ROADWAY CLEARANCE TIME"

(All lanes are reopened)

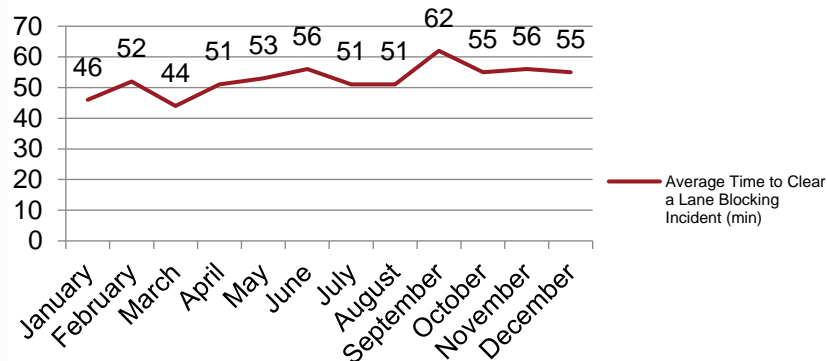
38 MIN.

"EVENT" CLEARANCE TIME

(All responders have left the incident scene)

50 MIN.

AVERAGE TIME TO CLEAR A LANE-BLOCKING INCIDENT (ALL ROUTES)



AVERAGE TIME TO CLEAR A LANE-BLOCKING INCIDENT (NON-INTERSTATE ROUTES)-IOWA NUMBERED STATES ROUTES, US HIGHWAYS

Calculated from the incident start time until all lanes are reopened.

The Desired Trend is to decrease the time to clear incidents with increased Traffic Incident Management collaboration.

"ROADWAY CLEARANCE TIME"

(All lanes are reopened)

87 MIN.

"EVENT" CLEARANCE TIME

(All responders have left the incident scene)

103 MIN.

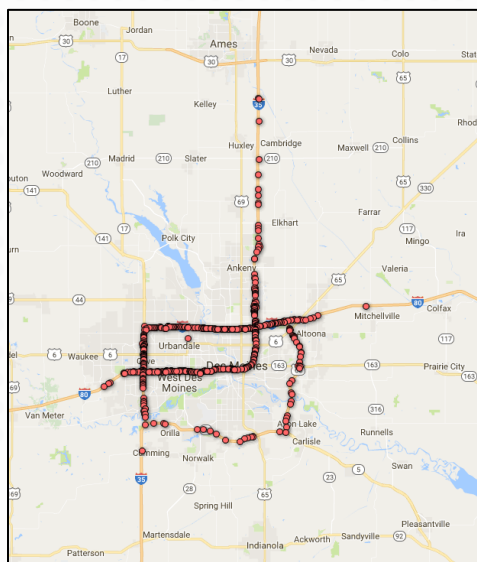
TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

HIGHWAY HELPER ASSIST BY LOCATION

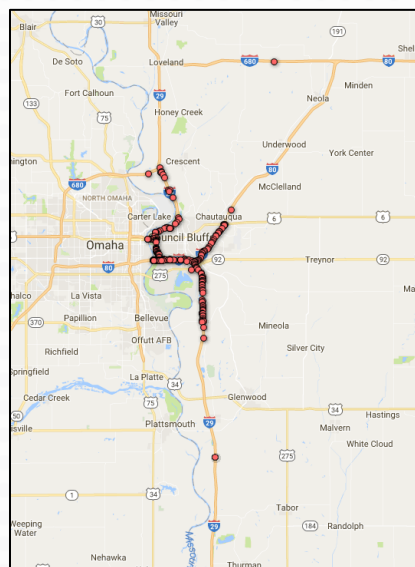
This represents the total amount of Highway Helper assists inputted into the ATMS system.

● = Highway helper detected incidents and response location.

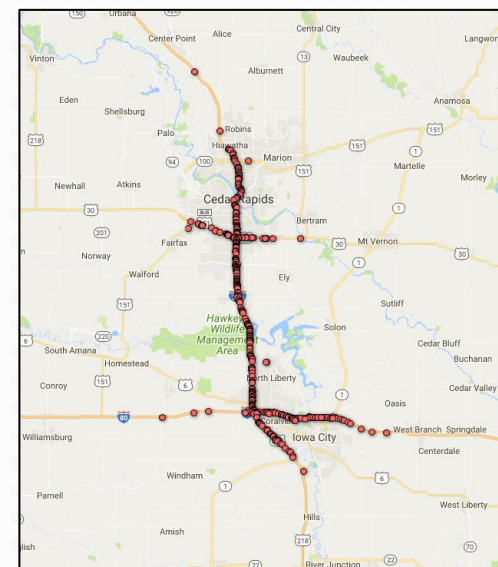
DES MOINES



COUNCIL BLUFFS



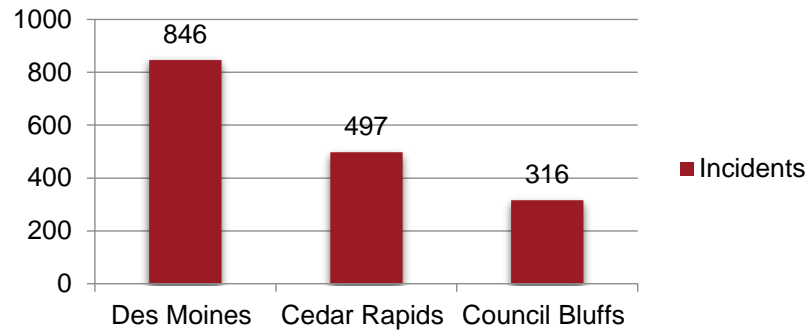
CEDAR RAPIDS/IOWA CITY



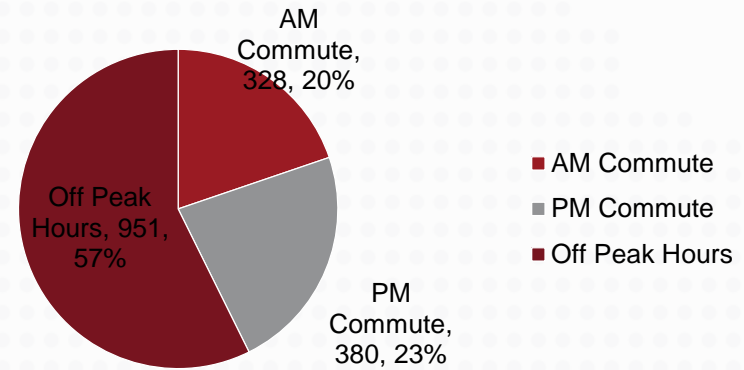
TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

MONTHLY INCIDENTS RESPONDED TO BY AREA

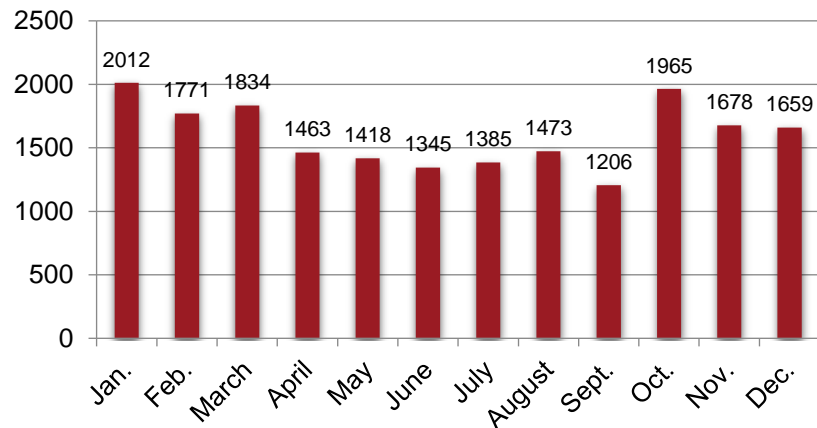
December



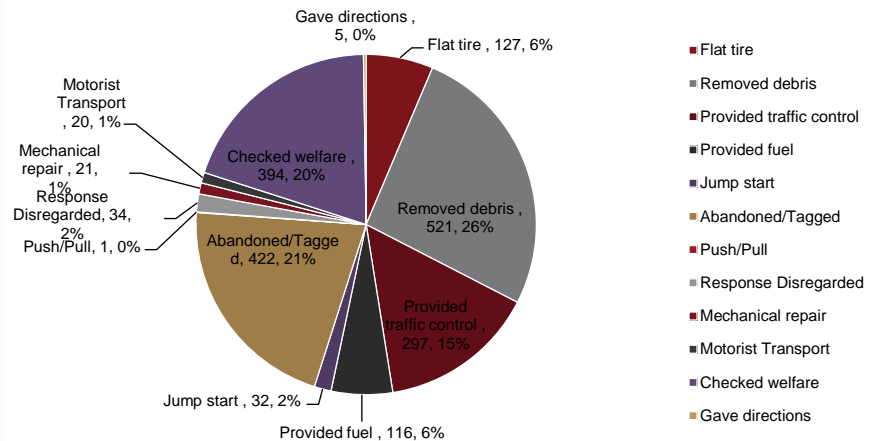
INCIDENT RESPONSE BY TIME OF DAY



TOTAL INCIDENTS RESPONDED TO BY HIGHWAY HELPER



HIGHWAY HELPER INCIDENT RESPONSE TYPE



TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

TOTAL PHONE COMMUNICATIONS BY THE TRAFFIC MANAGEMENT CENTER

This number represents all calls outgoing and incoming into the Traffic Management center

3811

TOTAL NUMBER OF EMERGENCY INCIDENT NOTIFICATIONS (EINS) DISTRIBUTED

(Statistic represents initial notification and doesn't represent updates.)

823

TOTAL NUMBER OF 511 ENTRIES MADE BY THE TRAFFIC MANAGEMENT CENTER

This number represents all entries and updates to 511 events (Includes roadwork)

1304

% OF INCIDENTS DETECTED BY TMC OPERATOR ON CCTV

(Desired Trend is to increase the amount of incidents located by operators through pro-active monitoring.)

44%

OPERATIONS STAFF SUMMARY

TMC Employee	# of Events entered in ATMS (Includes Roadwork)	# of EINS Created	Averaged Hours worked per week
Erik Castelline	355	127	40
Sarah Waters	756	76	40
Donovan Helm	175	46	40
Robert Folden	245	36	40
Tyrone Larry	382	56	40
Pennylee Harris	n/a	n/a	n/a
Andrew Gunn	721	163	40
Tommy Howard	332	66	40
Nick Glenn	234	49	40
Sydney Link	657	95	40
McKenna Link	422	109	40
TOTAL	4279	823	

ON-RAMP TICKETS CREATED BY TMC OPERATORS

TMC Employee	# of On-Ramp Tickets
Erik Castelline	1
Sarah Waters	16
Donovan Helm	1
McKenna Link	0
Tyrone Larry	29
Pennylee Harris	n/a
Andrew Gunn	82
Tommy Howard	0
Robert Folden	5
Sydney Link	2
Nick Glenn	23
TOTAL:	159

TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

OPERATOR TRAINING

On-going Training

- Winter weather operations

On-boarding Process and New Hire Training

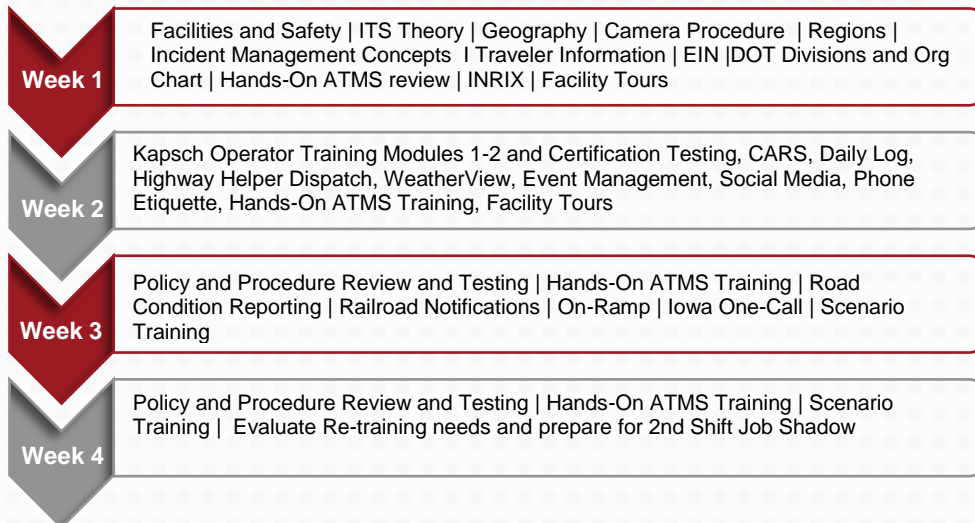
- Continued training of Robert Folden

Staffing Update

The current staffing levels are:

- Operations/Project Manager
- Ten (10) Full Time Operators
- One (1) Trainee

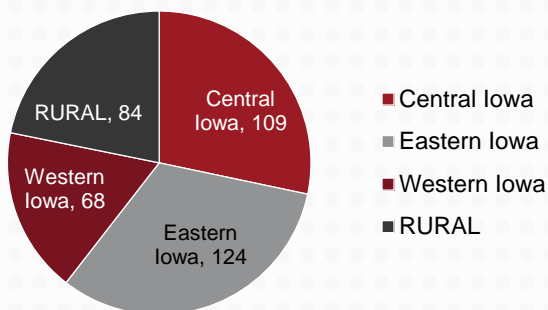
Modified 4 Week On-Boarding



AM Operators (6:00 am-2:30 pm)	PM Operators (2:00 pm-10:30 pm)	3rd Shift /Overnight (10:00 pm-6:30 am)	Trainees
Sarah Waters Sydney Link Tommy Howard McKenna Link	Erik Castelline Pennylee Harris Andrew Gunn	Donovan Helm Tyrone Larry Nick Glenn	Robert Folden

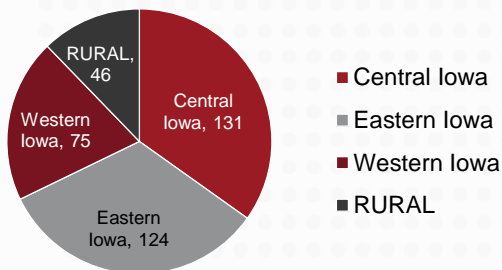
TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

ALL IOWA CAMERAS



Total Cameras: 385

ALL IOWA SENSORS



Total Sensors: 376

Year	Project	Description
1992-97	Initial Urban Area use of DMS	16 locations in Cedar Rapids, Des Moines and Quad Cities
2002	Iowa's 511 system Launched	
2003-05	I-235 Reconstruction-Des Moines	DMS, HAR, CCTV, and Detection. Highway Helpers
2005	First Statewide Deployment of DMS	13 locations
2006-08	I-80-Iowa City	DMS, HAR, CCTV, and Detection
2006-08	I-74-Bettendorf to Moline	DMS, HAR, CCTV, and Detection
2008	I-380 Extension	DMS, CCTV, and Detection
2008	TMC starts 24/7 Operations	
2009-11	Council Bluffs Reconstruction	DMS, HAR, CCTV, and Detection
2009-11	Sioux City Reconstruction	DMS, HAR, CCTV, and Detection
2012-13	I-380/US 20 Waterloo Reconstruction	DMS, CCTV, and Detection
2012	I-35/US 30 Ames	DMS, CCTV, and Detection
2012	I-380 Cedar Rapids	DMS, CCTV, and Detection
2012	I-80 Davenport	DMS, CCTV, and Detection
2012	Office of Traffic Operations Created	TSMO activities previously spread across organization in Research and Maintenance Offices
2013	I-80 Newton	DMS, CCTV, and Detection
2014-15	Fiber Construction from Ames to Des Moines to Iowa City to Cedar Rapids	Partnership with Iowa Communications Network (ICN)
2014	Statewide use of Probe Data	Data subscription service for link level travel speeds – supports enhanced monitoring of intercity corridors
2015	Highway Helpers Service-Council Bluffs and Cedar Rapids/Iowa City	Expansion of service from Des Moines area to other metro areas
2015	TMC Relocation from Ames to Ankeny	Relocation to a new, larger space in the MVD Building
2015	TSMO Strategic and Program Plans	
By 2022	Council Bluffs Interstate Reconstruction	New Color DMS, CCTV, RWIS, and Detection
By 2024	I-74 Mississippi River Bridge Replacement	Arterial DMS, CCTV, Fiber, and Detection

TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

Digital Traffic Systems Inc. – Monthly ITS Maintenance Overview

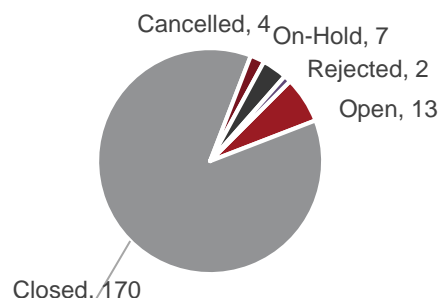


Device Type	Count (Active Sites)	Month Average Availability					
CCTV	362	■ Uptime ■ Downtime					
DMS – Overhead	75	2.55%	1.17%	2.52%	3.21%	1.32%	5.26%
DMS – Portable	82	97.45%	98.83%	97.48%	96.79%	98.68%	94.74%
DMS – Rest Area	34	Entire Network	DMS	CCTV	VEHICLE SENSOR	RWIS	CORE NETWORK
DMS – Sidemount	52	2.55%	1.17%	2.52%	3.21%	1.32%	5.26%
Vehicle Sensors	304	97.45%	98.83%	97.48%	96.79%	98.68%	94.74%
RWIS	71						
and Total	980						

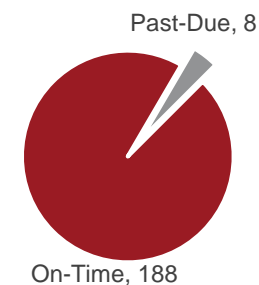
	Corrective Maintenance		Preventative Maintenance*	
Open	13	6.63%	0	0.00%
Closed	170	86.73%	131	97.76%
Cancelled	4	2.04%	3	2.24%
On-Hold	7	3.57%	0	0.00%
Rejected	2	1.02%	0	0.00%
Totals	196		134	

Past-Due	4.08%		4.08%	
On-Time	95.92%		95.92%	

Corrective Maintenance Ticket Status



Corrective Maintenance On-Time Performance



Average availability: Refers to the ability to communicate with a particular device.

Corrective Maintenance: Refers to when a device is not working properly and DTS is required to fix it,

Preventative Maintenance: is track to verify that DTS is meeting the requirements for scheduled maintenance.

*This page was created by DTS Inc. If you have any questions regarding or would like the full ITS monthly report or any other issues related to the ITS network contact Jason Dale in the Office of Traffic Operations.

TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

TRAFFIC CRITICAL PROJECTS

Number of Active Traffic Critical Projects	Number of Traffic Critical Projects with Intelligent Work Zones or Traffic Incident Management
(Data Source https://sites.google.com/site/iowatcp/tcp-list)	(58% of Total Ongoing TC Projects) (Data Source https://sites.google.com/site/iowatcp/tcp-list)
12	7

CONSTRUCTION AND MAINTENANCE

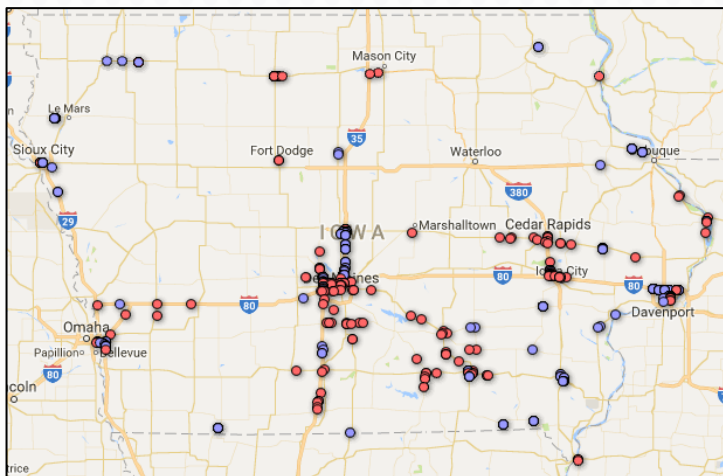
Number of Work Zones entered into the ATMS, (Includes all roadwork, short term maintenance and construction projects)
(Represents 40% of total events entered into the ATMS for November)
995

WORK ZONE CRASHES

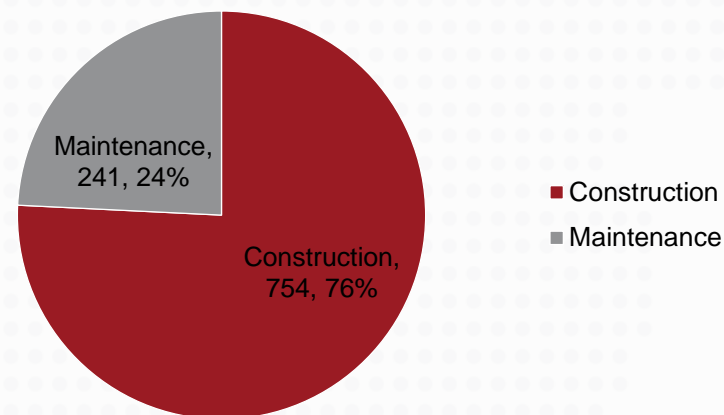
Number of Crashes in Work Zones
1

LOCATIONS OF WORK ZONES ENTERED INTO THE ATMS

- Construction Work Zones entered by TMC (754 of 995)
- Maintenance Work Zones entered by TMC (241 of 995)



WORK ZONES BY TYPE ENTERED INTO THE ATMS



TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD

Message Mondays

Message Monday is a safety initiative to increase public awareness of traffic deaths on Iowa's roadways. The message contains the aggregate number of traffic fatalities that have occurred since the start of the calendar year and a safety related message. **Iowa's goal is zero fatalities.**

December's Message Monday:

The Message Monday messages are displayed on 76 overhead DMS and 34 Rest Area DMS.

Zero Fatalities®
A Goal We Can All Live With

More details on Iowa traffic fatality counts can be found at

<https://www.iowadot.gov/mvd/stats/daily.pdf>

DECEMBER 4

304
TRAFFIC DEATHS
THIS YEAR
DECK THE HALLS
NOT THE GUY
WHO CUT YOU OFF

DECEMBER 11

314
TRAFFIC DEATHS
THIS YEAR
FULFILL
YOUR DESTINY
BUCKLE UP

DECEMBER 18

323
TRAFFIC DEATHS
THIS YEAR
TRIPLE DOG DARE...
PUT DOWN THE PHONE

DECEMBER 25

327
TRAFFIC DEATHS
THIS YEAR
SEAT BELTS
A GIFT THAT KEEPS
GIVING ALL YEAR

TRAFFIC MANAGEMENT CENTER INCIDENT RESPONSE DASHBOARD



Traveler Information
www.511ia.org or dial 511

TRAVELER INFORMATION

Traffic Management center activated **2,482** message boards in December 2017. (This number does not reflect Public Safety Announcements or TIS scheduled messages.)

Total number of calls to 511 in December 2017	Total Visits to 511 Traveler Information Website (Includes all versions of website)
14,434	551,242